

August 15, 2012

Mr. David Young California Regional Water Quality Control Board Los Angeles Region Site Cleanup Program 320 West 4<sup>th</sup> Street, Suite 200 Los Angeles, California 90013

First Semi-Annual Groundwater Well Monitoring Report 2012

Continental Heat Treating

10643 Norwalk Boulevard, Santa Fe Springs, California

(Site Id. No. 204GW00, SCP No. 1057)

Dear Mr. Young:

Fero Environmental Engineering, Inc. (Fero) conducted the first required semi-annual groundwater monitoring for 2012 at the subject site on May 3, 2012. The event was coordinated with Cardno ERI, Exxon/Mobil's consultant for their ongoing investigation on the Former Jalk Fee Property ("Jalk Fee") to the north so that the groundwater samples were collected at both sites on the same day. During the sampling event, Fero monitored four onsite wells (MW1-MW4) and Cardno monitored eight wells (MW3, MW4, MW5s, MW5m, MW5d, MW6s, MW6m and MW6d) on the Jalk Fee site.

Prior to pumping any water from the wells, the depths to groundwater in the four wells on the site (MW1-MW4) were gauged using an electronic gauging device, which allowed a monitoring accuracy of 0.01 foot. The depth to groundwater measurements were made from the water surface to a survey mark etched on the northern side of each casing. The wells were resurveyed on December 14, 2011 to include newly installed well MW4 and to check the elevations on the other wells. At least one of the well elevations had to be modified to accommodate onsite construction operations so a new survey was conducted. The new survey elevations were used to determine the elevation of the water table in each well. Gauging data for monitoring events conducted on the site by Fero are summarized in Table 1. The well locations are indicated on Figure 1.

The groundwater elevations were used to determine a generally planar surface which represents the local groundwater table and this surface was superimposed onto the base map (Figure 1). The soil type at the slotted section of MW4 was considerably different than the soils located at the screened depths of the other wells. The soils contained primarily silt and clay at MW4 and it was more sand at the other well locations. The elevation data suggest a very slight mound at MW4. The resulting slope of the groundwater table indicates a flow direction generally to the south under a gradient of approximately 0.0058 ft/ft from Cardno well MW7 to CHT well MW1.

Following gauging and prior to sampling, groundwater monitoring wells MW1-3 were purged of 25 gallons of water, the volume of which was based upon the volume of freestanding water in the wells and the observed stabilization of physical/chemical parameters during purging. The monitoring wells were purged until pH, color, conductivity, and temperature had stabilized. The monitoring wells were purged with a Grundfos variable speed 120-volt AC powered two stage centrifugal Stainless Steel purge pump with discharge through 1/2 inch PVC and Teflon tubing. Groundwater was pumped from the monitoring wells at a rate of approximately 1 gallon per minute. Physical and chemical purge monitoring parameters were measured in the field at the discharge line of the pump. Well purging data is attached hereto as Attachment A.

Subsequent to purging each well, the pump rate was reduced to approximately 100 ml/min whereupon a representative sample of groundwater was collected from the discharge line using 40 ml. glass sample vials. Teflon lined caps were secured tightly onto the 40 ml vials and each was visually inspected to assure that zero headspace had been achieved. The sample vials containing groundwater from each well were immediately placed in an ice chest containing ice and transported for analysis to Enviro-Chem, Inc. in Pomona accompanied by appropriate Chain-of-Custody documentation.

Fero attempted to develop newly installed well MW4 using a heavy 3 inch PVC bailer and the Grundfos pump after sampling the other wells on December 23, 2011. Because of the fine soil profile around the screened section of MW4, fines from the formation filled approximately 10 feet of screened section and the solids density of those fines was too high to allow the bailer to sink closer than about 10 feet from the bottom. Although the pump would drop into the fines, it was not able to pump them. A sample was collected from the clearer water above the mud using the bailer. The well was further developed on January 10, 2012 using a Smeal rig and bottom fill suction bailer. All of the particulates were removed from the well using the bailer and the well was further developed using a Grundfos pump to reduce the fines in the well and formation proximate to the slotted section of the well casing. The well produced water at approximately ¼ gallon per minute. A sample was collected from the Grundfos discharge line near the end of development process, it was analyzed at the lab and the results of the analysis are provided in Table 2.

During the January 10, 2012 sampling event, Fero pumped well MW-4 at a reduced rate of approximately ¼ gallon per minute in an effort to establish a continuous flow condition. Continuous flow was unachievable. Even this reduced pumping rate resulted in a continuously decreasing head in the well. Just before pump cavitation, which was determined with groundwater elevation gauging equipment, groundwater samples were collected as indicated above. Fero was able to remove 15 gallons of water from the well prior to pump cavitation. Samples were taken from the pump discharge into 40 ml glass vials just prior to cavitation which stops flow from the pump. As indicated above, Teflon lined caps were secured tightly onto the 40 ml vials and each was visually inspected to assure that zero headspace had been achieved. The sample vials containing groundwater from the well were immediately placed in an ice chest containing ice and transported at the end of the sampling day for analysis to Enviro-Chem, Inc. in Pomona accompanied by appropriate Chain-of-Custody documentation.

The groundwater samples were analyzed for Volatile Organic Compounds (VOCs) using EPA Method 8260B. Groundwater VOC analytical results from this and from previous events are

summarized in Table 2. Selected organics concentrations are included on all of the attached Figures. Lab analytical reports with associated chain-of-custody documentation are attached hereto as Attachment B.

On June 14, 2012, Fero received well survey data, groundwater elevation data, and water quality data from Cardno ERI (Exxon/Mobil's consultant) for wells MW-6, MW-7 and MW-8 on the Former Exxon/Mobil Jalk Fee Property to the north. The Cardno's data, as provided, are attached hereto. Cardno conducted groundwater sampling on the same day as Fero on May 3, 2012. The resulting data have been incorporated with Fero's data to generate groundwater flow contours and chemical iso-concentration plots for the seven organics with a sufficient number of data points to provide reasonable plots (PCE, TCE, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis 1,2-DCE, and VC). Those plots are attached as Figures 2-8. The groundwater flow direction continues to be in a southerly direction from Exxon/Mobil to the Continental Heat Treat.

The next semi-annual sampling event will likely occur sometime during November 2012. Fero will again coordinate the sampling event with the Cardno ERI, consultants for adjacent Exxon/Mobil in an effort to develop data that can help to explain conditions proximate to the two sites. Should you have any questions regarding the content of this Semi-Annual Groundwater Monitoring Report, please do not hesitate to call the undersigned at (714) 256-2737.

Respectfully,
Fero Environmental Engineering, Inc.

Rick L. Fero President

RLF: slf [758wellmon512]

**Table 1**Summary of Groundwater Elevation

## **Continental Heat Treating**

10643 Norwalk Boulevard, Santa Fe Springs, California (Site Id. No. 204GW00, SCP No. 1057)

<b>33</b> 7 - 11		TOC	Depth	Groundwater
Well	_	Elevation	to	Elevation
Number	Date	(ft MSL)	Groundwater (ft)	(ft MSL)
MW1	3/29/11	137.07	97.16	39.91
	6/15/11		94.50	42.57
	9/20/11		91.81	45.26
	12/23/11	137.08	90.13	46.95
	5/3/12		88.46	48.62
MW2	3/29/11	137.43	96.45	40.98
	6/15/11		93.74	43.69
	9/20/11		91.06	46.37
	12/23/11	138.04	90.05	47.99
	5/3/12		88.43	49.61
MW3	3/29/11	137.71	96.42	41.29
IVI W 5		137./1		
	6/15/11		93.94	43.77
	9/20/11		91.12	46.59
	12/23/11	137.03	89.43	47.60
	5/3/12		87.69	49.34
NASS74	12/22/11	127.55	90.42	40.12
MW4	12/23/11	137.55	89.43	48.12
	5/3/12		87.69	49.86

Table 2 Summary of Groundwater Analyses **Continental Heat Treating** 

10643 Norwalk Boulevard, Santa Fe Springs, California (Site Id. No. 204GW00, SCP No. 1057)

 $\begin{array}{c} (\mu g/L) \\ (DL-0.5~\mu g/L) \end{array}$ 

337.11	ъ.	ъ	CLI	1,4-	1,1-	cis-1,2-	t-1,2-	1,2-	1,1-	HCD	MAD	1,1,2,2-	DCE	1,2,3-	1,2,4-	TOE	TEN A	NG
Well	Date	Ben	Chl	DCB	DCA	DCE	DCE	DCA	DCE	HCB	NAP	TCA	PCE	TCB	TCB	TCE	TFM	VC
MW1	8/20/10	ND	0.97	ND	17.3	12.2	ND	113	224	ND	ND	ND	184	ND	ND	154	2.79	5.96
	3/29/11	ND	1.02	ND	17.7	600	14.9	ND	184	ND	ND	ND	210	ND	ND	170	5.54	27.8
	6/15/11	ND	1.50	ND	14.1	85.1	2.06	ND	117	ND	ND	ND	228	ND	ND	167	5.51	3.13
	9/23/11	ND	4.20	ND	25.3	118	2.14	ND	191	ND	ND	ND	182	ND	ND	164	13.2	3.50
	12/23/11	ND	3.33	ND	16.3	147	1.92	2.66	85.3	ND	1.90	ND	201	ND	ND	164	6.74	1.51
	5/3/12	ND	6.15	ND	32.2	433	6.80	4.96	191	ND	ND	ND	196	ND	ND	224	13.6	10.0
MW2	8/20/10	ND	1.71	0.70	21.8	50.6	0.76	F 12	126	1.14	2.47	0.92	235	2.72	1.24	178	9.49	0.89
IVI VV Z	3/29/11	ND ND	1.71	0.78 ND	22.8	59.6 55.1	0.76 ND	5.43 2.74	161	1.14 1.14	2.47 ND	0.92 ND	233	ND	ND	158	10.0	0.89
	6/15/11	ND ND	3.07	ND ND	24.2	85.3	1.53	4.83	149	ND	ND ND	ND ND	338	ND ND	ND ND	172	13.1	3.09
	9/23/11	ND	5.08	ND ND	28.1	100	2.09	5.88	177	ND ND	ND ND	ND	245	ND ND	ND ND	161	21.3	4.01
	12/23/11	ND ND	3.66	ND ND	18.3	53.0	0.65	2.69	77.6	NC	ND	ND	252	ND	ND ND	148	10/6	ND
	5/3/12	ND	8.72	ND ND	41.9	92.8	0.63	5.21	194	ND ND	ND ND	ND ND	177	ND ND	ND ND	163	24.2	ND ND
	3/3/12	ND	0.72	ND	41.7	92.0	0.54	3.21	1 74	ND	ND	ND	1//	ND	ND	103	24.2	ND
MW3	8/20/10	4.50	ND	ND	6.19	38.9	4.13	ND	57.1	1.18	2.43	ND	56.9	3.26	1.29	160	1.22	ND
	3/29/11	3.17	ND	ND	11.7	49.0	4.41	ND	185	ND	ND	ND	82.2	ND	ND	200	4.75	3.78
	6/15/11	1.01	0.91	ND	12.1	41.8	11.2	ND	124	ND	ND	ND	151	ND	ND	149	5.26	1.71
	9/23/11	ND	1.30	ND	14.3	43.6	13.6	ND	146	ND	ND	ND	120	ND	ND	130	7.45	1.32
	12/23/11	ND	1.61	ND	9.57	32.6	8.33	ND	62.1	ND	ND	ND	143	ND	ND	133	5.33	ND
	5/3/12	ND	5.81	ND	25.4	77.8	15.7	0.65	190	ND	ND	ND	137	ND	ND	165	13.3	1.35
	10/00/11		0.51		2.4	450			4.60		205		2			24.0		0.20
MW4	12/23/11	ND	0.54	ND	3.61	172	5.47	ND	16.9	ND	3.05	ND	36.0	ND	ND	21.9	ND	8.20
	1/10/12	ND	ND	ND	5.08	62.2	2.88	ND	25.6	ND	3.22	ND	70.1	ND	ND	47.5	ND	3.51
	5/3/12	ND	2.29	ND	20.9	284	9.63	0.54	148	ND	ND	ND	93.0	ND	ND	90.3	3.51	18.5

DL - detection limit, ND = Not Detected at DL, Ben - Benzene, Chl - Chloroform, DCB - Dichlorobenzene, DCA - Dichloroethane, DCE - Dichlorethene, HCB - Hexachlorobutadiene, NAP - Naphalene, TCA - $Tetracholoroethane,\ PCE-Tetrachloroethene,\ TCB-Trichloroethene,\ TFM-Trichlorofluoromethane,\ VC-Vinyl\ Chloride$ 

## Table 2 (cont.)

#### Summary of Groundwater Analyses

#### **Continental Heat Treating**

10643 Norwalk Boulevard, Santa Fe Springs, California (Site Id. No. 204GW00, SCP No. 1057)

 $(\mu g/L)$ 

 $(DL - 0.5 \mu g/L)$ 

Well	Date	Toluene	Sec- BBen	Ethyl Ben	IPB	4 IPT	n PBen	1,2,4- TMB	Xylene	111TCA
MW1	12/23/11 5/3/12	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
MW2	12/23/11 5/3/12	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1.14
MW3	12/23/11 5/3/12	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
MW4	12/23/11 1/10/12 5/3/12	1.50 ND ND	3.72 2.71 2.18	1.42 1.61 1.41	7.02 6.04 4.14	0.65 ND ND	7.03 6.30 3.17	ND 1.31 ND	ND 1.20 ND	ND

DL – detection limit, ND = Not Detected at DL, sec-BBen – sec-Butylbenzene, EthylBen – Ethylbenzene, IPB - Isopropylbenzene, 4 IPT – 4- Isopropyltoluene, n PBen – n-Propylbenzene

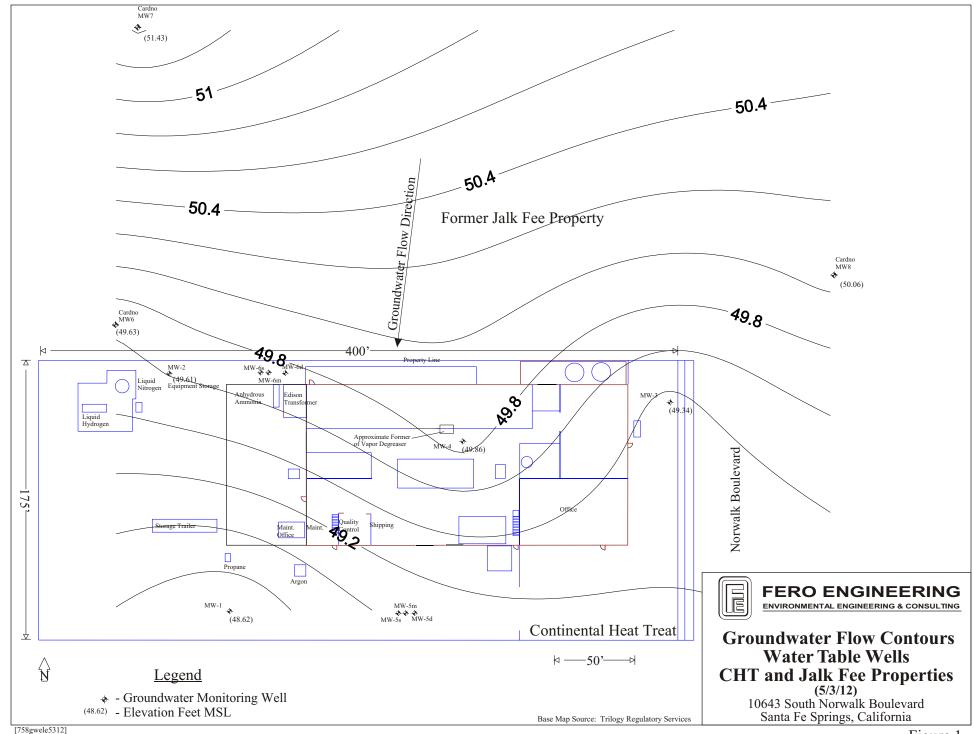
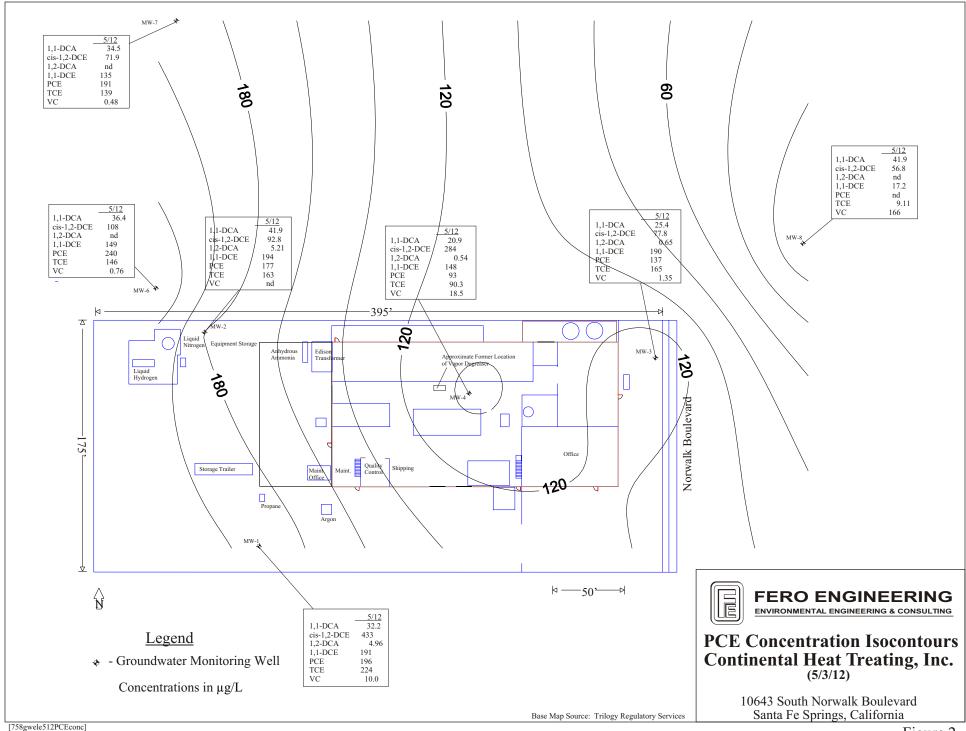
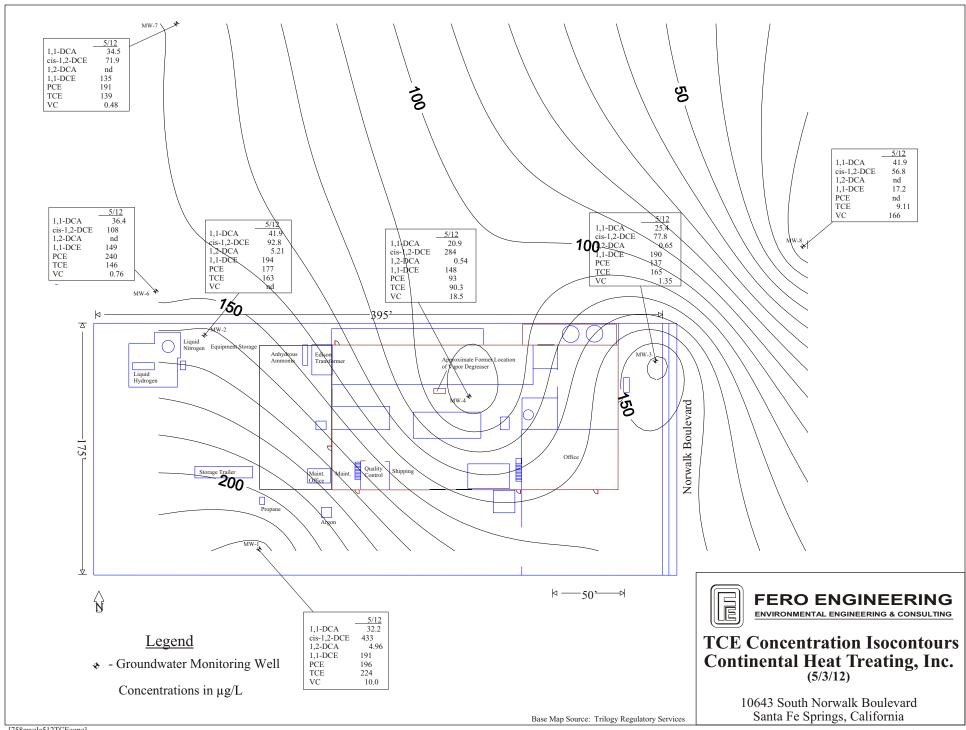
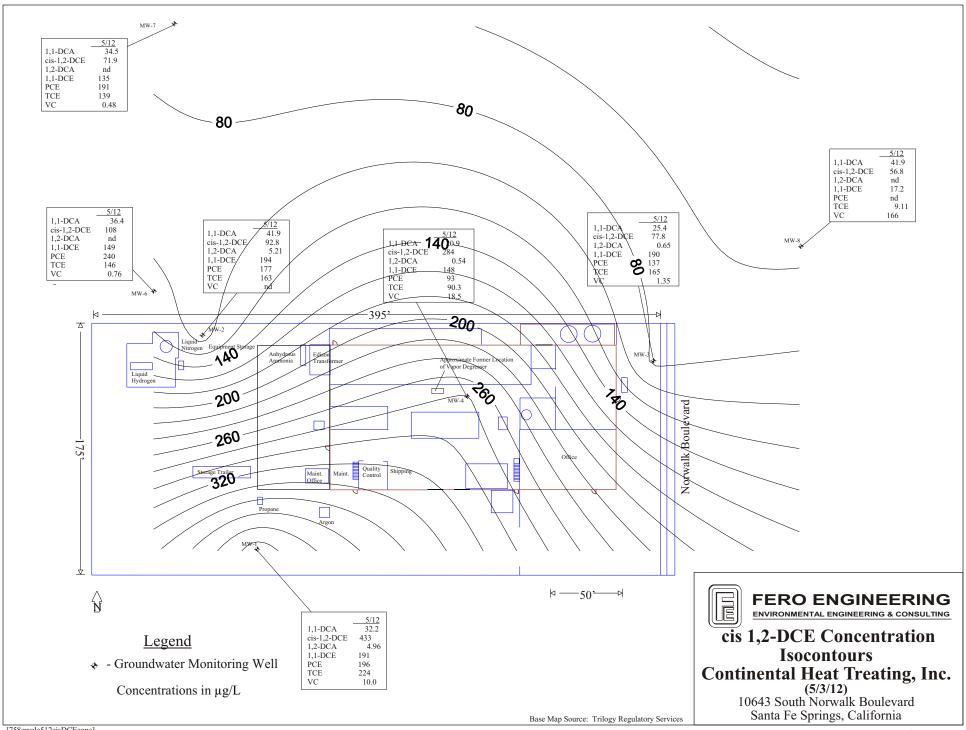
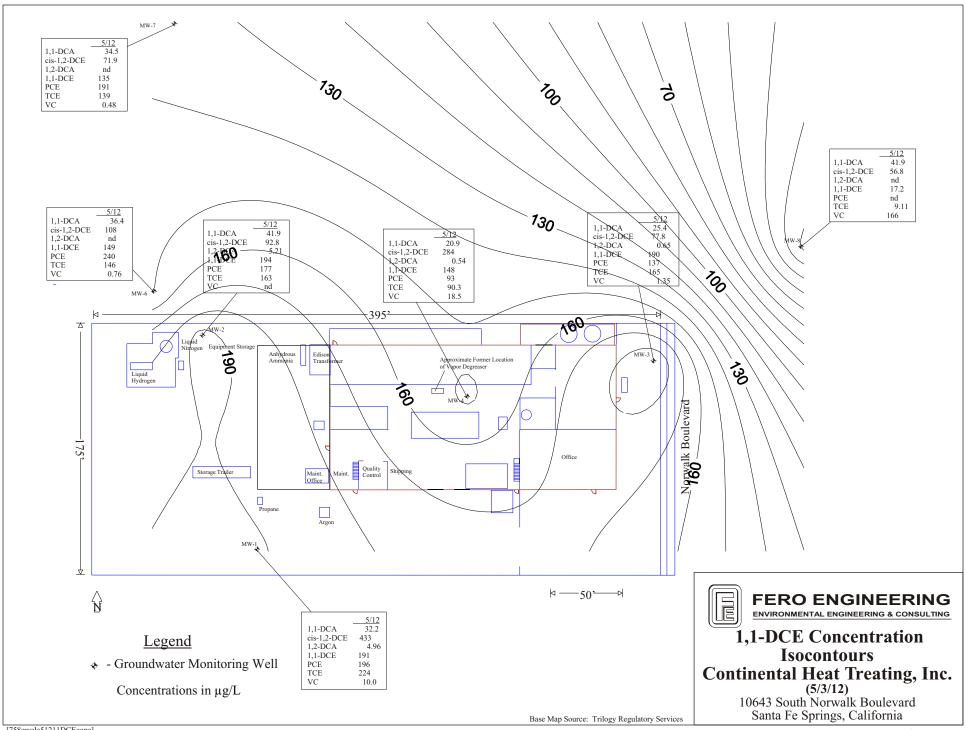


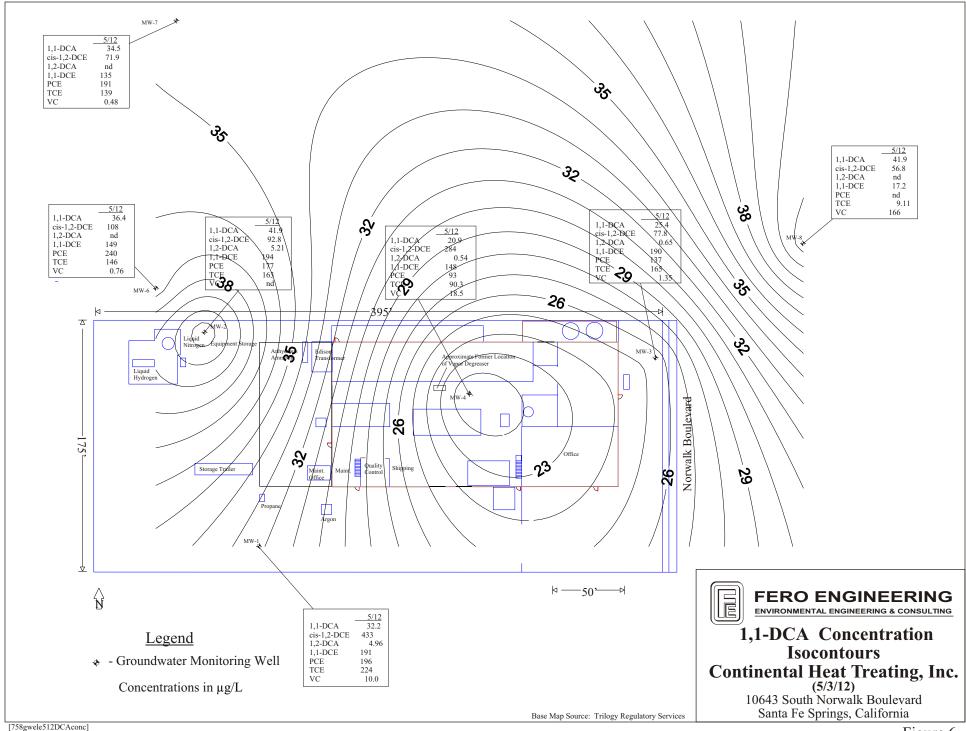
Figure 1

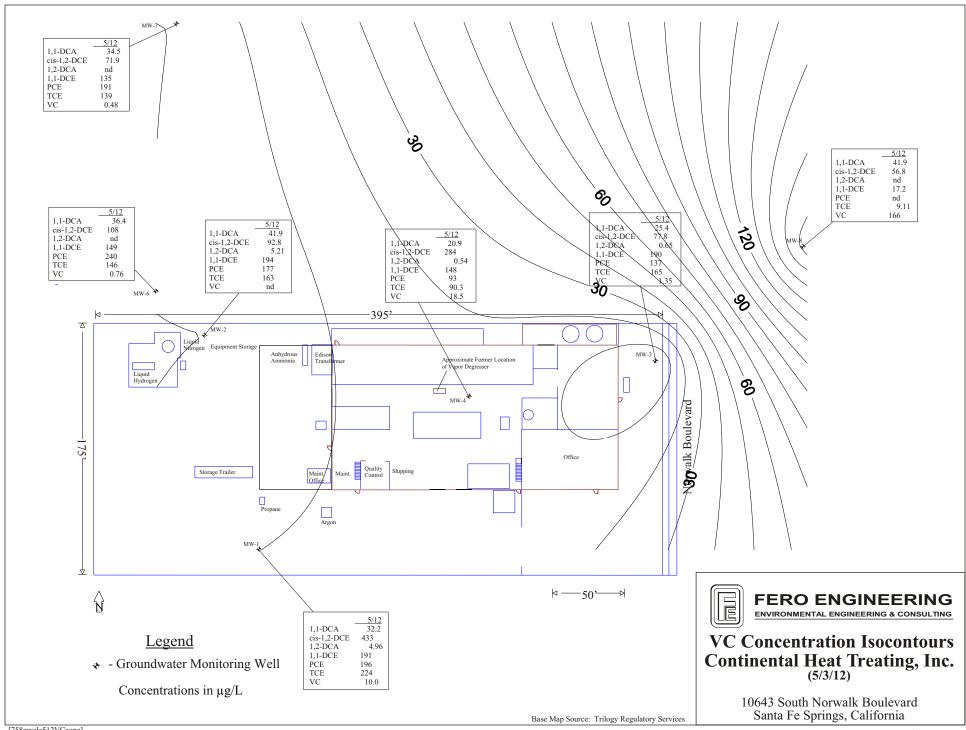


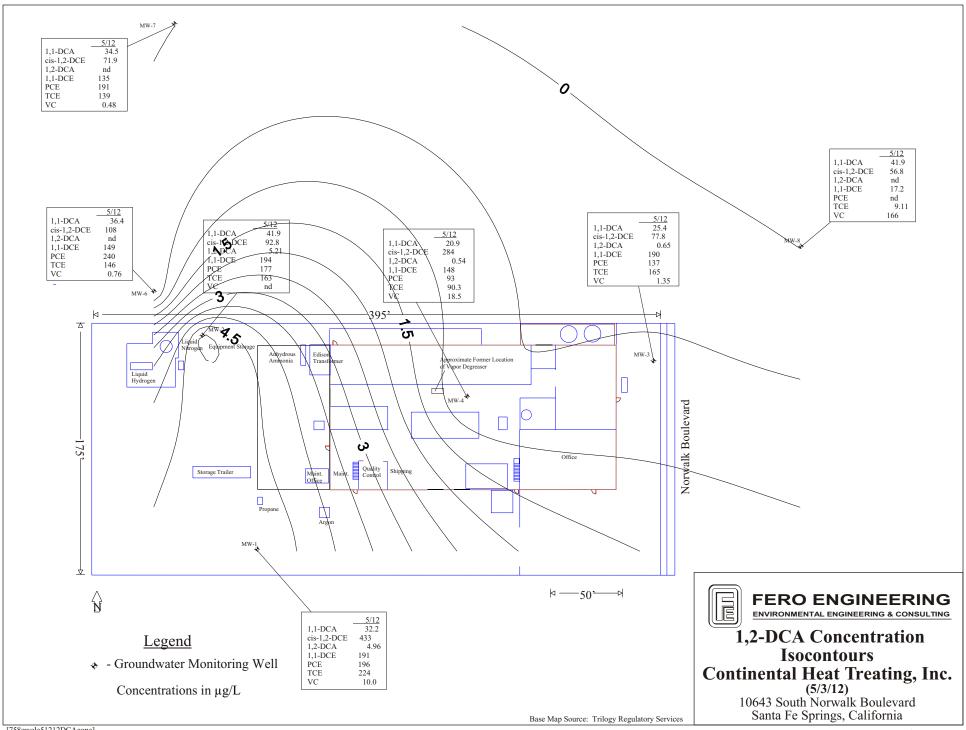












## ATTACHMENT A

Well Purge Report

**Site:** Continental Heat Treating **Job Number:** 10-0758

**Well I.D.:** MW1 **Date:** 5/3/12

**DTGW:** 88.46' **Time Sampled:** 2:40 pm

Volume (gal.)	Temp (F)	<u>pH</u>	Conductance (µmho)
5	74.6	7.28	1309
10	73.8	7.21	1327
15	73.0	7.14	1352
20	73.3	7.11	1375
25	72.9	7.09	1389

**Site:** Continental Heat Treating **Job Number:** 10-0758

**Well I.D.:** MW2 **Date:** 5/3/12

**DTGW:** 88.43' **Time Sampled:** 1:23 pm

Volume (gal.)	Temp (F)	<u>pH</u>	Conductance (µmho)
5	74.0	7.18	1378
10	73.9	7.11	1355
15	73.3	7.13	1375
20	73.1	7.09	1366
25	72.6	7.09	1364

**Site:** Continental Heat Treating **Job Number:** 10-0758

**Well I.D.:** MW3 **Date:** 5/3/12

**DTGW:** 87.69' **Time Sampled:** 2:00 pm

Volume (gal.)	Temp (F)	<u>pH</u>	Conductance (µmho)
5	72.8	7.03	1435
10	73.5	7.01	1451
15	73.6	7.01	1458
20	73.7	7.02	1451
25	73.5	7.03	1456

**Site:** Continental Heat Treating **Job Number:** 10-0758

**Well I.D.:** MW4 **Date:** 5/3/12

**DTGW:** 87.69' **Time Sampled:** 3:15 pm

Volume (gal.)	Temp (F)	<u>pH</u>	Conductance (µmho)
5	74.3	6.98	1181
10	74.3	6.92	1319
15	75.1	6.88	1790
20			
25			

## ATTACHMENT B

Enviro-Chem Laboratory Report

Date: May 9, 2012

Mr. John Petersen
Fero Environmental Engineering, Inc.
431 W. Lambert Road, Suite 305
Brea, CA 92821
Tel(714)256-2737 Fax(714)256-1505

Project: Continental Heat Treating / 12-758

Lab ID: 120503-38,39,40,41

Dear Mr. Petersen:

The analytical results for the water samples, received by our laboratory on May 3, 2012, are attached. All samples were received chilled, intact, and accompanying chain of custody record.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets

Vice President/Program Manager

Andy Wang

Laboratory Manager

#### LABORATORY REPORT FORM

LABORATORY NAME: ENVIRO-CHEM, INC.

ADDRESS: 1214 E. LEXINGTON AVE., POMONA, CA 91766

LABORATORY CERTIFICATION

(ELAP) No.: 1555 EXPIRATION DATE: 06/30/2013

LABORATORY DIRECTOR'S NAME: CURTIS DESILETS

LABORATORY'S DIRECTOR SIGNATURE:

CLIENT:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

Tel(714)256-2737 Fax(714)256-1505

PROJECT: Continental Heat Treating / 12-758

ANALYTICAL METHODS: EPA 5030B/8260B(VOCs)

SAMPLING DATE(S): 05/03/12 DATE RECEIVED: 05/03/12

DATE REPORTED: 05/09/12

SAMPLE MATRIX: WATER

EXTRACTION METHOD: SEE ATTACHMENTS

EXTRACTION MATERIAL: PER THE METHODS

CHAIN OF CUSTODY RECEIVED:

NO

---- SAMPLE HEADSPACE DESCRIPTION (%): 0 %

--- SAMPLE CONTAINER MATERIAL: 40 ML VOA VIALS (8)

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

#### LABORATORY REPORT FORM (COVER PAGE 2)

4

ORGANIC ANALYSES # OF SAMPLES # OF SAMPLES SUBCONTRACTED

0

SAMPLE CONDITION: CHILLED, INTACT, % HEADSPACE: 0%

<u>INORGANIC ANALYSES</u> # OF SAMPLES # OF SAMPLES SUBCONTRACTED

0 0

SAMPLE CONDITION:

MICROBIOLOGICAL ANALYSES # OF SAMPLES # OF SAMPLES SUBCONTRACTED

0 0

SAMPLE CONDITION:

OTHER TYPES OF ANALYSES # OF SAMPLES # OF SAMPLES SUBCONTRACTED

0 0

SAMPLE CONDITION:

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)
PAGE: 1 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

DATE SAMPLED: 05/03/12		DATI	E RECEIVEI	D: <u>05/03/12</u>	
DATE ANALYZED	05/	05/04/12			
DATE EXTRACTED		05/	04/12		
LAB SAMPLE I.D.		120	503-38		
CLIENT SAMPLE I.D.		MWl			
EXTRACTION SOLVENT		HEL	IUM GAS/W	ATER	
EXTRACTION METHOD		EPA	5030B		
DILUTION FACTOR (DF)		NON	E (15 MLs	PURGED)	
COMPOUND	CRDL	MB	RESULT		
ACETONE	2.0	ND	ND		
BENZENE	0.5	ND	ND		
BROMOBENZENE	0.5	ND	ND		
BROMOCHLOROMETHANE	0.5	ND	ND		
BROMODICHLOROMETHANE	0.5	ND	ND		
BROMOFORM	0.5	ND	ND		
BROMOMETHANE	0.5	ND	ND		
2-BUTANONE (MEK)	2.0	ND	ND		
N-BUTYLBENZENE	0.5	ND	ND		
SEC-BUTYLBENZENE	0.5	ND	ND		
TERT-BUTYLBENZENE	0.5	ND	ND		
CARBON DISULFIDE	2.0	ND	ND		
CARBON TETRACHLORIDE	0.5	ND	ND		
CHLOROBENZENE	0.5	ND	ND		
CHLOROETHANE	0.5	ND	ND		
CHLOROFORM	0.5	ND	6.15		
CHLOROMETHANE	0.5	ND	ND		
2-CHLOROTOLUENE	0.5	ND	ND		
4-CHLOROTOLUENE	0.5	ND	ND		
DIBROMOCHLOROMETHANE	0.5	ND	ND		
1,2-DIBROMO-3-CHLOROPROPANE	0.5	ND	ND		
1,2-DIBROMOETHANE	0.5	ND	ND		
DIBROMOMETHANE	0.5	ND	ND		
1,2-DICHLOROBENZENE	0.5	ND	ND		
1,3-DICHLOROBENZENE	0.5	ND	ND		
1,4-DICHLOROBENZENE	0.5	ND	ND		

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX:WATER REPORTING UNIT: uG/L(PPB)
PAGE: 2 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

DATE SAMPLED: 05/03/12		DA	TE RECEIVED: 05/03/12		
DATE ANALYZED		05/04/12			
DATE EXTRACTED		05	/04/12		
LAB SAMPLE I.D.		12	0503-38		
CLIENT SAMPLE I.D.		MW	1		
EXTRACTION SOLVENT		HE	LIUM GAS/WATER		
EXTRACTION METHOD		EP	A 5030B		
DILUTION FACTOR (DF)		NO	NE (15 MLs PURGED)		
COMPOUND	CRDL	MB	RESULT		
DICHLORODIFLUOROMETHANE	0.5	ND	ND		
1,1-DICHLOROETHANE	0.5	ND	32.2		
CIS-1,2-DICHLOROETHENE	0.5	ND	433 (DF=5)		
TRANS-1,2-DICHLOROETHENE	0.5	ND	6.80		
1,2-DICHLOROPROPANE	0.5	ND	ND		
1,2-DICHLOROETHANE	0.5	ND	4.96		
1,1-DICHLOROETHENE	0.5	ND	191 (DF=5)		
1,3-DICHLOROPROPANE	0.5	ND	ND		
2,2-DICHLOROPROPANE	0.5	ND	ND		
1,1-DICHLOROPROPENE	0.5	ND	ND		
CIS-1,3-DICHLOROPROPENE	0.5	ND	ND		
TRANS-1,3-DICHLOROPROPENE	0.5	ND	ND		
ETHYLBENZENE	0.5	ND	ND		
2-HEXANONE	2.0	ND	ND		
HEXACHLOROBUTADIENE	0.5	ND	ND		
IODOMETHANE	0.5	ND	ND		
ISOPROPYLBENZENE	0.5	ND	ND		
4-ISOPROPYLTOLUENE	0.5	ND	ND		
4-METHYL-2-PENTANONE (MIBK)	2.0	ND	ND		
METHYL tert-BUTYL ETHER	0.5	ND	ND		
METHYLENE CHLORIDE	2.0	ND	ND		
NAPHTHALENE	0.5	ND	ND		
N-PROPYLBENZENE	0.5	ND	ND		
STYRENE	0.5	ND	ND		
1,1,1,2-TETRACHLOROETHANE	0.5	ND	ND		

#### LABORATORY REPORT

METHOD: EPA 8260B

MATRIX: WATER REPORTING UNIT: uG/L(PPB)

PAGE: 3 OF 3 PAGES

PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

Tel(714)256-2737 Fax(714)256-1505

DAME CAMPLED 05/02/12		רע.	ATE RECEIVED: 05/03/12
DATE SAMPLED: 05/03/12		<i></i>	TE RECEIVED. 03/03/12
DATE ANALYZED		05	5/04/12
DATE EXTRACTED			5/04/12
LAB SAMPLE I.D.		12	20503-38
CLIENT SAMPLE I.D.		MV	<b>V1</b>
EXTRACTION SOLVENT		H	ELIUM GAS/WATER
EXTRACTION METHOD		EI	PA 5030B
DILUTION FACTOR (DF)		NC	ONE (15 MLs PURGED)
COMPOUND	CRDL	MB	RESULT
1,1,2,2-TETRACHLOROETHANE	0.5	ND	ND
TETRACHLOROETHENE (PCE)	0.5	ND	196 (DF=5)
TOLUENE	0.5	ND	ND
1,2,3-TRICHLOROBENZENE	0.5	ND	ND
1,2,4-TRICHLOROBENZENE	0.5	ND	ND
1,1,1-TRICHLOROETHANE	0.5	ND	ND
1,1,2-TRICHLOROETHANE	0.5	ND	ND
TRICHLOROETHENE (TCE)	0.5	ND	224 (DF=5)
TRICHLOROFLUOROMETHANE	0.5	ND	13.6
1,2,3-TRICHLOROPROPANE	0.5	ND	ND
1,2,4-TRIMETHYLBENZENE	0.5	ND	ND
1,3,5-TRIMETHYLBENZENE	0.5	ND	ND
VINYL CHLORIDE	0.5	ND	10.0
M, P-XYLENE	1.0	ND	ND
O-XYLENE	0.5	ND	ND

uG/L = MICROGRAM PER LITER = PPB

CRDL = CONTRACT REQUIRED DETECTION LIMIT

MB = METHOD BLANK

ND = NON-DETECTED OR BELOW THE CRDL

DATA APPROVED BY:\_

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX:WATER REPORTING UNIT: uG/L(PPB)
PAGE: 1 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

DATE SAMPLED: 05/03/12		DA <sup>r</sup> .	TE RECEIVED: 05/03/12
DAME ANALYZED		05	/04/12
DATE ANALYZED		00000	/04/12
DATE EXTRACTED			0503-39
LAB SAMPLE I.D.		MW	Vote 1 control of the
CLIENT SAMPLE I.D.			LIUM GAS/WATER
EXTRACTION SOLVENT			A 5030B
EXTRACTION METHOD			NE (15 MLs PURGED)
DILUTION FACTOR (DF)	anne		RESULT
COMPOUND	CRDL	MB	2-2-2-2-3 September 2
ACETONE	2.0	ND ND	ND
BENZENE	0.5	ND	ND
BROMOBENZENE	0.5	ND	ND ND
BROMOCHLOROMETHANE	0.5	ND	ND
BROMODICHLOROMETHANE	0.5	ND	ND
BROMOFORM	0.5	ND_	ND
BROMOMETHANE	0.5	ND	ND
2-BUTANONE (MEK)	2.0	ND	ND
N-BUTYLBENZENE	0.5	ND	ND
SEC-BUTYLBENZENE	0.5	ND_	ND
TERT-BUTYLBENZENE	0.5	ND_	ND
CARBON DISULFIDE	2.0	ND	ND
CARBON TETRACHLORIDE	0.5	ND	ND
CHLOROBENZENE	0.5	<u>N</u> D	ND ND
CHLOROETHANE	0.5	ND	ND
CHLOROFORM	0.5	ND_	8.72
CHLOROMETHANE	0.5	ND	ND
2-CHLOROTOLUENE	0.5	ND	ND
4-CHLOROTOLUENE	0.5	ND	ND
DIBROMOCHLOROMETHANE	0.5	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	0.5	ND_	ND
1,2-DIBROMOETHANE	0.5	ND	ND
DIBROMOMETHANE	0.5	ND	ND
1,2-DICHLOROBENZENE	0.5	ND	ND
1,3-DICHLOROBENZENE	0.5	ND	ND
1,4-DICHLOROBENZENE	0.5	ND	ND

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)
PAGE: 2 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

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DATE SAMPLED: 05/03/12		DA'	TE RECEIVED: 05/03/12		
DATE ANALYZED	05	05/04/12			
DATE EXTRACTED		05	/04/12		
LAB SAMPLE I.D.		12	0503-39		
CLIENT SAMPLE I.D.		MW	2		
EXTRACTION SOLVENT		HE	LIUM GAS/WATER		
EXTRACTION METHOD		EP.	A 5030B		
DILUTION FACTOR (DF)		NO	NE (15 MLs PURGED)		
COMPOUND	CRDL	MB	RESULT		
DICHLORODIFLUOROMETHANE	0.5	ND	ND		
1,1-DICHLOROETHANE	0.5	ND	41.9		
CIS-1,2-DICHLOROETHENE	0.5	ND	92.8		
TRANS-1,2-DICHLOROETHENE	0.5	ND	0.54		
1,2-DICHLOROPROPANE	0.5	ND	ND		
1,2-DICHLOROETHANE	0.5	ND	5.21		
1,1-DICHLOROETHENE	0.5	ND	194 (DF=5)		
1,3-DICHLOROPROPANE	0.5	ND	ND		
2,2-DICHLOROPROPANE	0.5	ND	ND		
1,1-DICHLOROPROPENE	0.5	ND	ND		
CIS-1,3-DICHLOROPROPENE	0.5	ND	ND		
TRANS-1,3-DICHLOROPROPENE	0.5	ND	ND		
ETHYLBENZENE	0.5	ND	ND		
2-HEXANONE	2.0	ND	ND		
HEXACHLOROBUTADIENE	0.5	ND	ND		
IODOMETHANE	0.5	ND	ND		
ISOPROPYLBENZENE	0.5	ND	ND		
4-ISOPROPYLTOLUENE	0.5	ND	ND		
4-METHYL-2-PENTANONE (MIBK)	2.0	ND	ND		
METHYL tert-BUTYL ETHER	0.5	ND	ND		
METHYLENE CHLORIDE	2.0	ND	ND		
NAPHTHALENE	0.5	ND	ND		
N-PROPYLBENZENE	0.5	ND	ND		
STYRENE	0.5	ND	ND		
1,1,1,2-TETRACHLOROETHANE	0.5	ND	ND		

<sup>-</sup> CONTINUED -

#### LABORATORY REPORT

METHOD: <u>EPA 8260B</u>

MATRIX: WATER REPORTING UNIT: uG/L(PPB)

PAGE: 3 OF 3 PAGES

PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

431 W. Lambert Road, Suite 305

Brea, CA 92821

Tel(714)256-2737 Fax(714)256-1505

DATE SAMPLED: 05/03/12		DA	TE RECEIVED: 05/03/12
DAME ANALYZED		05	5/04/12
DATE ANALYZED			5/04/12
DATE EXTRACTED			10503-39
LAB SAMPLE I.D.		MW	
CLIENT SAMPLE I.D.			LIUM GAS/WATER
EXTRACTION SOLVENT			PA 5030B
EXTRACTION METHOD			ONE (15 MLs PURGED)
DILUTION FACTOR (DF)	CDDI	MB	RESULT
COMPOUND	CRDL	ND	ND
1,1,2,2-TETRACHLOROETHANE	0.5	-0.2.00	177 (DF=5)
TETRACHLOROETHENE (PCE)	0.5	ND	ND
TOLUENE	0.5	ND	
1,2,3-TRICHLOROBENZENE	0.5	ND	ND ND
1,2,4-TRICHLOROBENZENE	0.5	ND	ND
1,1,1-TRICHLOROETHANE	0.5	ND	1.14
1,1,2-TRICHLOROETHANE	0.5	ND	ND
TRICHLOROETHENE (TCE)	0.5	ND	163
TRICHLOROFLUOROMETHANE	0.5	ND	24.2
1,2,3-TRICHLOROPROPANE	0.5	ND	ND
1,2,4-TRIMETHYLBENZENE	0.5	ND	ND
1,3,5-TRIMETHYLBENZENE	0.5	ND	ND
VINYL CHLORIDE	0.5	ND	ND
M, P-XYLENE	1.0	ND	ND
O-XYLENE	0.5	ND	ND

uG/L = MICROGRAM PER LITER = PPB

CRDL = CONTRACT REQUIRED DETECTION LIMIT

MB = METHOD BLANK

ND = NON-DETECTED OR BELOW THE CRDL

DATA APPROVED BY:

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX:WATER REPORTING UNIT: uG/L(PPB)
PAGE: 1 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

Fero Environmental Engineering, Inc.

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Brea, CA 92821

DATE ANALYZED         05/04/12           DATE EXTRACTED         05/04/12           LAB SAMPLE I.D.         120503-40           CLIENT SAMPLE I.D.         MW3           EXTRACTION SOLVENT         HELIUM GAS/WATER           EXTRACTION METHOD         EPA 5030B           DILUTION FACTOR (DF)         NONE (15 MLs PURGED)           COMPOUND         CRDL         MB RESULT           ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND           PROMOCHLOROMETHANE         0.5         ND         ND	DATE SAMPLED: 05/03/12		DA'	TE RECEIVED: 05/03/12
DATE EXTRACTED         05/04/12           LAB SAMPLE I.D.         120503-40           CLIENT SAMPLE I.D.         MW3           EXTRACTION SOLVENT         HELIUM GAS/WATER           EXTRACTION METHOD         EPA 5030B           DILUTION FACTOR (DF)         NONE (15 MLs PURGED)           COMPOUND         CRDL         MB RESULT           ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND				
LAB SAMPLE I.D.         120503-40           CLIENT SAMPLE I.D.         MW3           EXTRACTION SOLVENT         HELIUM GAS/WATER           EXTRACTION METHOD         EPA 5030B           DILUTION FACTOR (DF)         NONE (15 MLs PURGED)           COMPOUND         CRDL         MB RESULT           ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND	DATE ANALYZED			70,040
CLIENT SAMPLE I.D.         MW3           EXTRACTION SOLVENT         HELIUM GAS/WATER           EXTRACTION METHOD         EPA 5030B           DILUTION FACTOR (DF)         NONE (15 MLs PURGED)           COMPOUND         CRDL         MB RESULT           ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND	DATE EXTRACTED		05	/04/12
EXTRACTION SOLVENT         HELIUM GAS/WATER           EXTRACTION METHOD         EPA 5030B           DILUTION FACTOR (DF)         NONE (15 MLs PURGED)           COMPOUND         CRDL MB RESULT           ACETONE         2.0 ND ND           BENZENE         0.5 ND ND           BROMOBENZENE         0.5 ND ND	LAB SAMPLE I.D.		12	0503-40
EXTRACTION METHOD	CLIENT SAMPLE I.D.		MW	3
DILUTION FACTOR (DF)	EXTRACTION SOLVENT		HE	LIUM GAS/WATER
COMPOUND         CRDL         MB         RESULT           ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND	EXTRACTION METHOD			
ACETONE         2.0         ND         ND           BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND	DILUTION FACTOR (DF)		NO	NE (15 MLs PURGED)
BENZENE         0.5         ND         ND           BROMOBENZENE         0.5         ND         ND	COMPOUND	CRDL	MB	RESULT
BROMOBENZENE 0.5 ND ND	ACETONE	2.0	ND	ND
<u> </u>	BENZENE	0.5	ND	ND
PROMOCHLOPOMETHANE 0.5 ND ND	BROMOBENZENE	0.5	ND	ND
BROMOCHIOROMETHEME	BROMOCHLOROMETHANE	0.5	ND	ND
BROMODICHLOROMETHANE 0.5 ND ND		0.5	ND	ND
BROMOFORM 0.5 ND ND	BROMOFORM	0.5	ND	ND
BROMOMETHANE 0.5 ND ND	BROMOMETHANE	0.5	ND	ND _
2-BUTANONE (MEK) 2.0 ND ND	2-BUTANONE (MEK)	2.0	ND	ND
N-BUTYLBENZENE 0.5 ND ND	N-BUTYLBENZENE	0.5	ND	ND
SEC-BUTYLBENZENE 0.5 ND ND	SEC-BUTYLBENZENE	0.5	ND	ND _
TERT-BUTYLBENZENE 0.5 ND ND	TERT-BUTYLBENZENE	0.5	ND	ND
CARBON DISULFIDE 2.0 ND ND	CARBON DISULFIDE	2.0	ND	ND
CARBON TETRACHLORIDE 0.5 ND ND	CARBON TETRACHLORIDE	0.5	ND	ND
CHLOROBENZENE 0.5 ND ND	CHLOROBENZENE	0.5	ND	ND
CHLOROETHANE 0.5 ND ND	CHLOROETHANE	0.5	ND	ND
CHLOROFORM 0.5 ND 5.81		0.5	ND	5.81
CHLOROMETHANE 0.5 ND ND		0.5	ND	ND
2-CHLOROTOLUENE 0.5 ND ND	2-CHLOROTOLUENE	0.5	ND	ND
4-CHLOROTOLUENE 0.5 ND ND	4-CHLOROTOLUENE	0.5	ND	ND
DIBROMOCHLOROMETHANE 0.5 ND ND		0.5	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE 0.5 ND ND		0.5	ND	ND
1,2-DIBROMOETHANE 0.5 ND ND		0.5	ND	ND
DIBROMOMETHANE 0.5 ND ND		0.5	ND	ND
1,2-DICHLOROBENZENE 0.5 ND ND		0.5	ND	ND
1,3-DICHLOROBENZENE 0.5 ND ND		0.5	ND	ND
1,4-DICHLOROBENZENE 0.5 ND ND				

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX:WATER REPORTING UNIT: uG/L(PPB)
PAGE: 2 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

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	DI	TE RECEIVED: <u>05/03/12</u>
		/04/12
		/04/12
	12	0503-40
	MW	
	HE	LIUM GAS/WATER
		A 5030B
	NO	NE (15 MLs PURGED)
CRDL	MB	RESULT
0.5	ND	ND
0.5	ND	25.4
0.5	ND	77.9
0.5	ND	15.7
0.5	ND	ND
0.5	ND	0.65
0.5	ND	190
0.5	ND_	ND
0.5	ND	ND
0.5	ND_	ND
2.0	ND	ND
0.5	ND	ND
2.0	ND	ND
0.5	ND	ND
2.0	ND	ND
0.5	ND	ND
	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	05 12 MW HE EP NO CRDL MB 0.5 ND

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)
PAGE: 3 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

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DATE SAMPLED: 05/03/12		DA	TE RECEIVED: 05/03	/12
DATE ANALYZED		05	/04/12	
DATE EXTRACTED		0.5	/04/12	
LAB SAMPLE I.D.		12	0503-40	
CLIENT SAMPLE I.D.		MV	13	
EXTRACTION SOLVENT		H	LIUM GAS/WATER	
EXTRACTION METHOD		EI	PA 5030B	
DILUTION FACTOR (DF)		NO	NE (15 MLs PURGED	)
COMPOUND	CRDL	MB	RESULT	
1.1.2.2-TETRACHLOROETHANE	0.5	ND	ND	
TETRACHLOROETHENE (PCE)	0.5	ND	137	
TOLUENE	0.5	ND	ND	
1,2,3-TRICHLOROBENZENE	0.5	ND	ND	
1,2,4-TRICHLOROBENZENE	0.5	ND	ND	
1,1,1-TRICHLOROETHANE	0.5	ND	ND	
1,1,2-TRICHLOROETHANE	0.5	ND	ND	
TRICHLOROETHENE (TCE)	0.5	ND	165	
TRICHLOROFLUOROMETHANE	0.5	ND	13.3	
1,2,3-TRICHLOROPROPANE	0.5	ND	ND	
1,2,4-TRIMETHYLBENZENE	0.5	ND	ND	
1,3,5-TRIMETHYLBENZENE	0.5	ND	ND	
VINYL CHLORIDE	0.5	ND	1.35	
M, P-XYLENE	1.0	ND	ND	
O-XYLENE	0.5	ND	ND	

uG/L = MICROGRAM PER LITER = PPB

CRDL = CONTRACT REQUIRED DETECTION LIMIT

MB = METHOD BLANK

ND = NON-DETECTED OR BELOW THE CRDL

DATA APPROVED BY:

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)
PAGE: 1 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

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DATE SAMPLED: 05/03/12		DA'	TE RECEIVED: 05/03/12
DATE ANALYZED			/04/12
DATE EXTRACTED		-	/04/12
LAB SAMPLE I.D.		12	0503-41
CLIENT SAMPLE I.D.		MW	
EXTRACTION SOLVENT		HE	LIUM GAS/WATER
EXTRACTION METHOD			A 5030B
DILUTION FACTOR (DF)		NO	NE (15 MLs PURGED)
COMPOUND	CRDL	MB	RESULT
ACETONE	2.0	ND	ND
BENZENE	0.5	ND	ND
BROMOBENZENE	0.5	ND	ND
BROMOCHLOROMETHANE	0.5	ND	ND
BROMODICHLOROMETHANE	0.5	ND	ND
BROMOFORM	0.5	ND	ND
BROMOMETHANE	0.5	ND	ND
2-BUTANONE (MEK)	2.0	ND	ND
N-BUTYLBENZENE	0.5	ND	ND
SEC-BUTYLBENZENE	0.5	ND	2.18
TERT-BUTYLBENZENE	0.5	ND	ND
CARBON DISULFIDE	2.0	ND	ND
CARBON TETRACHLORIDE	0.5	ND	ND
CHLOROBENZENE	0.5	ND	ND
CHLOROETHANE	0.5	ND	ND
CHLOROFORM	0.5	ND	2.29
CHLOROMETHANE	0.5	ND	ND
2-CHLOROTOLUENE	0.5	ND	ND
4-CHLOROTOLUENE	0.5	ND	ND
DIBROMOCHLOROMETHANE	0.5	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	0.5	ND	ND
1,2-DIBROMOETHANE	0.5	ND	ND
DIBROMOMETHANE	0.5	ND	ND
1,2-DICHLOROBENZENE	0.5	ND	ND
1,3-DICHLOROBENZENE	0.5	ND	ND
1,4-DICHLOROBENZENE	0.5	ND	ND

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)
PAGE: 2 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

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DAME ANALYZED		05	/04/12
DATE ANALYZED			/04/12
DATE EXTRACTED			0503-41
LAB SAMPLE I.D.		MW	
CLIENT SAMPLE I.D.			LIUM GAS/WATER
EXTRACTION SOLVENT			A 5030B
EXTRACTION METHOD			NE (15 MLs PURGED)
DILUTION FACTOR (DF)	CRDL	MB	RESULT
COMPOUND		ND	ND ND
DICHLORODIFLUOROMETHANE	0.5	ND	20.9
1,1-DICHLOROETHANE	0.5	ND	284 (DF=5)
CIS-1,2-DICHLOROETHENE	0.5	ND	9.63
TRANS-1,2-DICHLOROETHENE	0.5		ND
1,2-DICHLOROPROPANE	0.5	ND	0.54
1,2-DICHLOROETHANE	0.5	ND	
1,1-DICHLOROETHENE	0.5	ND	148
1,3-DICHLOROPROPANE	0.5	ND	ND
2,2-DICHLOROPROPANE	0.5	ND	ND
1,1-DICHLOROPROPENE	0.5	ND	ND
CIS-1,3-DICHLOROPROPENE	0.5	ND	ND
TRANS-1,3-DICHLOROPROPENE	0.5	ND	ND
ETHYLBENZENE	0.5	ND	1,41
2-HEXANONE	2.0	ND	ND
HEXACHLOROBUTADIENE	0.5	ND	ND
IODOMETHANE	0.5	ND	ND
ISOPROPYLBENZENE	0.5	ND_	4.14
4-ISOPROPYLTOLUENE	0.5	ND	ND
4-METHYL-2-PENTANONE (MIBK)	2.0	ND	ND
METHYL tert-BUTYL ETHER	0.5	ND	ND
METHYLENE CHLORIDE	2.0	ND	ND
NAPHTHALENE	0.5	ND	ND
N-PROPYLBENZENE	0.5	ND	3.17
STYRENE	0.5	ND	ND
1,1,1,2-TETRACHLOROETHANE	0.5	ND	ND

#### Enviro - Chem, Inc.

## 1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

#### LABORATORY REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)

PAGE: 3 OF 3 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

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DATE SAMPLED: 05/03/12		DP	ATE RECEIVED: 05/03/1:	2
DATE ANALYZED		0.5	5/04/12	
DATE EXTRACTED		0.5	5/04/12	
LAB SAMPLE I.D.		12	20503-41	_
CLIENT SAMPLE I.D.		MV	V4	
EXTRACTION SOLVENT		<u>H</u>	ELIUM GAS/WATER	
EXTRACTION METHOD		EI	PA 5030B	
DILUTION FACTOR (DF)		NO	ONE (15 MLs PURGED)	
COMPOUND	CRDL	MB	RESULT	
1,1,2,2-TETRACHLOROETHANE	0.5	ND	ND	_
TETRACHLOROETHENE (PCE)	0.5	ND	93.0	_
TOLUENE	0.5	ND	ND	_
1,2,3-TRICHLOROBENZENE	0.5	ND	ND	
1,2,4-TRICHLOROBENZENE	0.5	ND	ND	
1,1,1-TRICHLOROETHANE	0.5	ND	ND	
1,1,2-TRICHLOROETHANE	0.5	ND	ND	
TRICHLOROETHENE (TCE)	0.5	ND	90.3	
TRICHLOROFLUOROMETHANE	0.5	ND	3.51	
1,2,3-TRICHLOROPROPANE	0.5	ND	ND	_
1,2,4-TRIMETHYLBENZENE	0.5	ND	ND	
1,3,5-TRIMETHYLBENZENE	0.5	ND	ND	
VINYL CHLORIDE	0.5	ND	18.5	_
M, P-XYLENE	1.0	ND	ND	
O-XYLENE	0.5	ND	ND	

uG/L = MICROGRAM PER LITER = PPB

CRDL = CONTRACT REQUIRED DETECTION LIMIT

MB = METHOD BLANK

ND = NON-DETECTED OR BELOW THE CRDL

DATA APPROVED BY:\_

## QA/QC REPORT

METHOD: EPA 8260B MATRIX: WATER REPORTING UNIT: uG/L(PPB)

PAGE: 1 OF 8 PAGES PROJECT: Continental Heat Treating / 12-758

CUSTOMER:

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DATE SAMPLED: 05/03/12

DATE RECEIVED: 05/03/12

DATE ANALYZED DATE EXTRACTED 05/04/12

05/04/12

SEE ATTACHED PAGES (7)

#### Enviro-Chem, Inc.

8260B QA/QC Report

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

Date Analyzed:

5/4-5/2012

ı. <u>ə</u>

524BW147

Matrix: Unit: Water

Method: Machine:

В

ug/L (PPB)

#### Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 120504-LCS1/2

Spiked Salliple Lab I.D		120304-LC	31/2						
Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Trichloroethene	0.00	25.0	25.1	100%	25.1	100%	0%	80-120	0-20
Toluene	0.00	25.0	30.9	124%	28.8	115%	7%	80-120	0-20
Ethylbenzene	0.00	25.0	26.4	106%	25.9	103%	2%	80-120	0-20
Cis-1,2-Dichloroethene	0.00	25.0	25.7	103%	29.8	119%	15%	80-120	0-20
Tetrachloroethene	0.00	25.0	23.4	94%	24.4	98%	4%	80-120	0-20
i etrachioroethene	0.00	25.0	23.4	94%	24.4	98%	4%	80-120	<u>J</u>

Lab Control Spike (LCS)

-an control opinio (-1				
Analyte	spk conc	LCS	%RC	ACP %RC
1,1,1-TCA	25.0	27.1	108%	80-120
Tetrachloroethene	25.0	22.9	91%	80-120
Benzene	25.0	27.0	108%	80-120
Toluene	25.0	29.2	117%	80-120
Ethylbenzene	25.0	26.7	107%	80-120
Chloroform	25.0	28.3	113%	80-120

Calibration date: 11/11/2011

Continuing Calibration Check (CCC)

AvgRF	CCRF	%Dev	%RSD
0.749	0.774	3.34	10.23
0.357	0.364	1.96	12.24
0.996	1.001	0.50	12.75
1.322	1.369	3.56	10.80
0.808	0.792	1.98	6.86
1.064	1.080	1.50	8.99
	0.749 0.357 0.996 1.322 0.808	0.749         0.774           0.357         0.364           0.996         1.001           1.322         1.369           0.808         0.792	0.749     0.774     3.34       0.357     0.364     1.96       0.996     1.001     0.50       1.322     1.369     3.56       0.808     0.792     1.98

Surrogate Recovery	spk conc	ACP%	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	120503-38	120503-39	120503-40	120503-41		
Dibromofluoromethane	25.0	75-125	112%	104%	105%	104%	103%		
Toluene-d8	25.0	75-125	97%	101%	99%	102%	105%		
4-Bromofluorobenzene	25.0	75-125	74%	76%	72%	79%	74%		

Surrogate Recovery	spk conc	ACP%	%RC						
Sample I.D.									1040
Dibromofluoromethane	25.0	75-125							
Toluene-d8	25.0	75-125							
4-Bromofluorobenzene	25.0	75-125							

Surrogate Recovery	spk conc	ACP%	%RC						
Sample I.D.									
Dibromofluoromethane	25.0	75-125							
Toluene-d8	25.0	75-125							
4-Bromofluorobenzene	25.0	75-125							

<sup>\* =</sup> Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By:

Final Reviewer:

								-	
# GC	Standard Name:	Solvent	Stock Standard	Calculation STD V X STD Conc. = Fi Total Volume	ion = Final Conc.	Ref./ Page	Prep. Date	Exp. Date	Initial
8157	8>60B In/surr	Name: Medit Source: Figher Cat #: A4571 Lot #: [104.12	Name: Source: Cat #: Lot #:	detail in Logbook A3. P. 31	ts. p. 31 50 ppm		1/51/	N R	2
2519	8288 878	Exp. Date: Name: MeOH Source: Figher Cat #: A457 Lot #: [10412 Exp. Date:	EXP. Date: Name: 8>6DB In  Sur/r Source: A(-2519) Cat #: Lot #:	IML STOPPING	Mdd S.		1100 1001	3/20	22
25.50	8260B Gas	Name: Medit Source: TSher Cat #: A4531 Lot #: [10412	Name: Gras 5th Source: Mitta Cat #: DWM-544 Lot #: GC-1486	= mddaaax x xnsizl	20.00		12/2	120	22
127	8 260B	Name: Meold Source: Fisher Cat #: A443-1 Lot #: 110412	Source: Ultwo Cat #: DWM - 544 Lot #: (5,C-1486 Bop. Date: (5,Z)13	mego CK = regular x Jus 21	meldoin		10/2/	30/2	3
752	Sy 60B	Name: Meth Source: Forker Cat #: A 463-1 Lot #: [1042 Exp. Date:	Name: GRS STO Source: Ulfric. cat #: DWN-544 Lot #: CAC-1486 Exp. Date: \$11318	Mes x soupen	= (Toppm)	0,	1 my spark	JA JAN	3
12x	Source	Name: MedH Source: Fasher Cat #: A.UK3 1 Lot #: 10412 Exp. Date:	MAME: SAS STO SOURCE: UNEW Cat #: DAIN - SUF LOT #: SAC - 1986 Exp. Date: S([3])	my a month	= touppor		15 T	100 July 100	3
tex	8260B	Name: 420H Source: Fisher Cat #: A453-1 Lot #: 110412	Source: With Source: With Cat #: DWM-1486	12.5 sed x socopper	- So.oppm		100/21/01	1100/24/01/1100/21/01	Z
		EXD. Date:					PAGE	E OF 100	00

gc pence #	Standard Name:	Solvent	Stock Standard	Calculation STD V X STD Conc. Total Volume	Ref./ Page	Prep. Date	Exp. Date	Initial
2629	Diesel	Name: C /2 Source: Pt/h47 Cat #: C573-579 Lot #: N2418	Mame: Diefel Stol Source: Restek Cat #: 31278 Lot #: An (4478	Souppy o, that = 2000 pm		tille stills H	thlis	X
2630	80928	Exp. Date: Name: MROW Source: FISA of Cat #: PASS -1 Lot #: [104(2)	Name: Source: Cat #: Lot #: Exp. Date:	Check Detail in 1777	Į.	21/1/1	1/2/12 8/m/a Pro	13
120	Brook Gas	Name: Molt Source: Fisher Cat #: Presyl Lot #: [Ottly	Source: Milks Stall Source: With the Cat #: DWM-544 Lot #: Ell-1406	125 WL x2000 pm 50,0 ppm		别	AN SHIP PA	3
	6	Name: Source: Cat #: Lot #:		* <b>x</b>				
* 6		Name: Source: Cat #:	Name: Source: Cat #: Lot #: Exp. Date:	×				
	,	Name: Source: Cat #: Lot #: Exp. Date:	Name: Source: Cat #: Lot #: Exp. Date:	×		- 4		
	į	Name: Source: Cat #: Lot #: Exp. Date:	Name: Source: Cat #: Lot #: Exp. Date:	×				
						7	001400	3

OF 100 PAGE

	7,0			Calculation	Ref. / P	Prep.   Exp.	Initia
	o+pudard	1000	Stock Standard	C. = Final Conc.	-	Date Date	
# ecunentes	Name:	SOLVEIL	Ar A Gin	Total Volume		2011	
-	Acrolein	Marago.	Source: Ald rich Cat #: (1023/	LIG. OWN X900 - 2000 PPM-	( (	4/9/12 4/8/13	Z.
S (S)		1	Bxp. Date:	chock Dotail In		491, 1-1-XI	n And
poqu	Sheo B	Source: Fighor Cat #: 87(3)-1	Name: Source: Cat #: Lot #:	x Laybook A3- 146	1	71/2	5
		Exp. Date:	Exp. Date:	Mark Details in	١	4/9/2 10/2012 PW	MJ 200
2/910	800/8	Source: Tyle	Source:  Cat #:  Tot #:				-
>	3	Exp. Date:	Exp. Date:	Check Detail in		4/4/3 8/2/1	de Pro-
	80908	Name: V	Source: Cat #:	x leappook & 2-48	l	4	3
- J	12881		ate:			1 1 1	1
	BAOB	Name: V	Source: CLITA SA	125ul x200ppm = 50.0ppm	1	1/6/12 21/9//2	Z 75%
7,915	Gas	Cat #: Lot #:	Lot #: (1(-1496)	0,50ml			-
	Sons	Source: Fichor	Source: With	PSUL x000 PPM 50.0 PPM	٤	2/8/1 2/8/4	Safe PA
1995			Lot #: 010-1480	O Som			
	80908		Name: CLAL STD	Patul 2000 Ppm 6,10 DPM	1	* * * * * * * * * * * * * * * * * * *	1 2/kg
tiga	_	Cat #: A778-1	Lot #: GC-1486	2,50mL			
		Exp. Date:	Exp. Date: 7			PAGE	OF 100
		129					9
7			And the second s				

Page 5,100

Standard Name: Prbo 15/5011	15 SUTY	Analyst:	PW	GC#: 7630	. '(
Preparation Date: $9/\nu$ ( $20/2$ )	2100			Expiration Date: \$ 31 [12	
Compound Name	Source	Catalog #	Lot#	Exp date   Calculation   STD V x STD Conc   Total Volume   Final Conc	Initial
Internal strandark (Notra	CAPA	SM-34M-1 CF-2990	CF-2990	8/31/12 15/00/2 X2000/Pm 50,0	2
Champacke standard (Altho	(NO HA	S(W-330N	CH-0721	1000 m	So.o. Pu
The state of the s				×	
				×	
				X	
				X	
				X	
				X	
				×	11.
				×	11.
				×	11.
				×	и.
Total Standard Volume: 0.750m/	J. VSDWL	Added Solvent Volume: 4, Howl	Though H	Final Volume: S.OWL	62,5

Analyst: Standard Name: 8260 B CCV

3

GC#: spad

Expiration Date: 2/28/13

1284-589N
592 MM

Total Standard Volume: 0. [40 ML

Added Solvent Volume: 9.X0ML

Final Volume: [0,0 ML

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Page (7100

GC#: 7610	Expiration Date: $\frac{ \mathcal{O}  \times 0.2}{ \mathcal{O} }$
Analyst: PW	
Standard Name: 8760 LCS	Preparation Date: 4/9(5012

Compound Name	Source	Catalog #	Lot#	Exp date	Calculation STD V x STD Conc =Final Conc	Intial
					Total Volume	
ACIOLO (n.	GC1/508			118/4	WOULX MOUNT GO. O PPM	3
VOC MIXTURE	Portliant	Portliant PRSOM	2 102/01 10/20173	1002)01	med c'es = 10.01 7m0.01	3
VOC Maxture	WETA	DWM-592	CG-2284	8/4/13	CB-2284 8/21/13 25046 X1000Ppr-50.0Ppm	Z
					" X	
					T X	
					= X	
					= X	
			,		X	
				7.	X	
					X	
					= X	
					X	
	270		0-10			

Total Standard Volume: 0. KOML

Added Solvent Volume: (0, 0121)

	Misc. CH RUCEB	Required								Sampler's Signature.	Project Namerille: (2 - 758	Continental Head Treature	Instructions for Sample Storage After Analysis:	Dispose of O Return to Client O Store (30 Days)	O Other:		Page of	
*	\$ R. D. S. S. D.	Analysis Rec	<i>y</i>	*	7	<b>*</b>				ohn Kersensa	ă.	wall Rolicom	Date (1040)	Date & Time:	Date & Time:	RECORD	TN3	
	е соитаіие <i>в</i> энгута	TEMP	2 Har	7	2	7				Project Contact:	Tel:	Ext. Seroe	PROX.	,		CUSTODY R	WHITE WITH SAMPLE · YELLOW TO CLIENT	
		SAMPLING FE DATE TIME	5cm 0			V 3115 V				ţ	ben 2 305	12824	Received by:	Received by:	Received by:	OF	WHITE WITH	
		LABID	(12/10/23815)	1-3	047	14				Fud.	1 S. CLEUX	TREA, CRY		) *			1	
	Enviro-Chem, Inc. Laboratories 1214 E. Lexington Avenue, Pomona, CA 91766 Tel: (909) 590-5905 Fax: (909) 590-5907 CA-DHS ELAP CERTIFICATE #1555	SAMPLEID	1278	2 MW	MWS	MWA				Company Name:	Address: 43	/Zip:	Relinquished by:	Relinquished by:	Relinquished by:		Date:	